CLAIMS

What is claimed is:

1. A primer tank for generating a primer vapor, comprising:

a tank body for containing a liquid primer; and

a nozzle assembly having a plurality of nozzle openings provided in said tank body for ejecting a plurality of gas streams against the liquid primer.

2. The primer tank of claim 1 wherein said nozzle assembly comprises a gas inlet pipe for receiving a primary gas stream and a nozzle plate provided in fluid communication with said gas inlet pipe, and wherein said plurality of nozzle openings extends through said nozzle plate.

3. The primer tank of claim 1 further comprising a level sensor provided in said tank body for sensing a level of the liquid primer in said tank body.

4. The primer tank of claim 3 wherein said nozzle assembly comprises a gas inlet pipe for receiving a primary gas stream and a nozzle plate provided in fluid communication with said gas inlet pipe, and wherein said plurality of nozzle openings extends through said nozzle plate.

5. The primer tank of claim 1 further comprising a vapor outlet tube provided in fluid communication with said tank body for distributing the primer vapor from said tank body.

6. The primer tank of claim 5 wherein said nozzle assembly comprises a gas inlet pipe for receiving a primary gas stream and a nozzle plate provided in fluid communication with said gas inlet pipe, and wherein said plurality of nozzle openings extends through said nozzle plate.

7. The primer tank of claim 5 further comprising a level sensor provided in said tank body for sensing a level of the liquid primer in said tank body.

8. The primer tank of claim 7 wherein said nozzle assembly comprises a gas inlet pipe for receiving a primary gas stream and a nozzle plate provided in fluid communication with said gas inlet pipe, and wherein said plurality of nozzle openings extends through said nozzle plate.

9. A primer tank for generating a primer vapor, comprising:

a tank body for containing a liquid primer; and

a nozzle assembly provided in said tank body, said nozzle assembly having a gas inlet pipe for receiving a primary gas stream; a housing having a housing interior provided in fluid communication with said gas inlet pipe; and a nozzle plate having plurality of nozzle openings carried by said housing for receiving the primary gas stream and ejecting a plurality of secondary gas streams against the liquid primer.

10. The primer tank of claim 9 further comprising a level sensor provided in said tank body for sensing a level of the liquid primer in said tank body.

11. The primer tank of claim 9 further comprising a vapor outlet tube provided in fluid communication with said tank body for distributing the primer vapor from said tank body.

12. The primer tank of claim 11 further comprising a level sensor provided in said tank body for sensing a level of the liquid primer in said tank body.

13. The primer tank of claim 9 wherein said plurality of nozzle openings are arranged in a plurality of radially-extending rows in said nozzle plate.

14. The primer tank of claim 13 further comprising a level sensor provided in said tank body for sensing a level of the liquid primer in said tank body.

15. The primer tank of claim 13 further comprising a vapor outlet tube provided in fluid communication with said tank body for distributing the primer vapor from said tank body.

16. The primer tank of claim 15 further comprising a level sensor provided in said tank body for sensing a level of the liquid primer in said tank body.

17. A method of generating a primer vapor from a liquid primer, comprising the steps of:

providing a primer tank having a tank body;

providing the liquid primer in said tank body; and

directing an inert gas against the liquid primer in a plurality of gas streams.

18. The method of claim 17 wherein said liquid primer comprises hexamethyldisilazone.

19. The method of claim 17 wherein each of said plurality of gas streams has a pressure of about 0.75 Kpa.

20. The method of claim 17 wherein said directing an inert gas against the liquid primer in a plurality of gas streams comprises the steps of providing a primary gas stream, dividing said primary gas stream into said plurality of gas streams, and directing said plurality of gas streams against the liquid primer.